

**REMARKS**

Claims 25, 26, 28, and 29 are pending in this application. Claims 1-24 have been cancelled as being drawn to the non-elected invention. Claims 25, 26, 28, and 29 stand rejected. No claim is objected to. Applicants amend claims 25 and 28-29 herein. Claim 30 is newly added. Support for amended claims 25 and 28 can be found at pages page 6, lines 4-15, as well as originally filed claim 8. Support for amended claim 29 and new claim 30 can be found at page 16, lines 18-22 of the specification. Thus, no new matter is added.

In view of the following amendment and response, Applicants believe the claims presented herein are allowable. Reconsideration is respectfully requested.

**SEQUENCE COMPLIANCE**

A Sequence Error Report was submitted with the Office Action, requiring that Applicants correct responses on line <220> of SEQ ID NOs. 6 and 7. Applicants herein correct the sequence listing at line <220> of SEQ ID NOs 5-7. In addition, the Examiner indicates that SEQ ID NO.:9 will only be considered a polynucleotide sequence. The Examiner further suggests that the amino acid sequence currently presented in SEQ ID NO.9 be given its own sequence identifier. Applicants herein separate SEQ ID NO.9 to recite only polynucleotides sequence while the amino acid sequence formerly disclosed as part of SEQ ID NO.9 is now recited in SEQ ID NO.14. Thus, no new matter is added. Both a paper and electronic copy of the sequence listing is also sent to Mailstop: SEQUENCE.

**35 U.S.C. §112, SECOND PARAGRAPH**

Claim 29 stands rejected under 35 U.S.C. §112, second paragraph for allegedly being indefinite. The Examiner alleges that the phrase “corresponding to” is not clear. Applicants herein provide a substitute sequence listing wherein the polynucleotide and amino acid sequences of SEQ ID NO:9 are given the sequence identifiers of SEQ ID NO:9 and SEQ ID NO:14, respectively. This new sequence listing adds no new matter. Applicant also herein amend claim 29 to recite Lp-PLA2 enzymes that “comprise amino acids 271-441 of SEQ ID NO:14.” Support for this amendment can be found, for instance, at page 16, lines 18-22 of the specification. Similarly, Applicants herein add new claim 30 which recites Lp-PLA2 enzymes that “comprise amino acids encoded by nucleotides 848 to 1361

of SEQ ID NO:9.” Support for new claim 30 can also be found at page 16, lines 18-22 of the specification.

### **35 U.S.C. §112, FIRST PARAGRAPH**

Claims 25, 26, and 28 stand rejected under 35 U.S.C. 112, first paragraph for allegedly not reasonably providing enablement for an or all Lp-PLA2 having at least 90% sequence identity with a human SEQ ID NO:9. The Examiner alleges that the specification does not enable any person skilled in the art to make the invention “commensurate in scope with these claims.” Specifically, The Examiner alleges that “[c]laims 25-26 and 28 are so broad as to encompass any Lp-PLA2 from any or all sources and enzymes comprising fragments.”

Applicants amend claims 25 and 28 herein to include the phrase “over the entire length of the enzyme.” Thus, the Examiner’s allegation that the claims comprise all fragments is moot. In addition, Applicants amend claim 25 and 28 herein to recite that the naturally occurring Lp-PLA2 enzyme is from “human.” Thus, the Examiner’s allegation that the claims are “so broad to encompass any Lp-PLA from any and all sources” is also moot.

Applicants traverse the rejection with respect to the allegation that Applicants do not enable the invention for full length enzymes. With respect to full length enzymes, the specification specifically discloses at page 16, lines 8-28, that a deduced peptide sequence obtained from a fetal spleen EST supports different full length sequences than a human embryo EST and a full-length lymphoma sequence. Applicants further submit that the skilled artisan would understand that enzymes with similar activities and derived from the same source can have varied amino acid sequences. For instance, Campbell, *et al.* (WO 02/36817, SmithKline Beecham PLC) describe polymorphisms or naturally occurring variations in DNA sequences within an organism which may or may not manifest in an observed phenotype. Specifically, Campbell, *et al.*, describe polymorphisms that naturally occur within Lp-PLA2 at position 379. Furthermore, Campbell, *et al.* also cite Cousens, *et al.* (WO 95/09921, ICOS Corporation) which discloses another known polymorphism of Lp-PLA2 at position 279. Both of these publications were submitted with an IDS with the response filed on April 23, 2004 for this application.

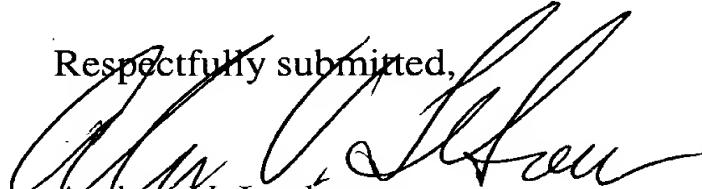
Applicants further submit that with respect to full length sequences of Lp-PLA enzymes isolated from serum, they have identified at least two differences in the same

enzyme from different cell lines from human. Applicants respectfully submit that because variants and polymorphism are understood to exist within a specific enzyme it is reasonable to assume that polypeptides recited in claims 25 and 28 may not have identical sequences to each other, even if they are obtained from the same species. Thus, Applicants respectfully submit that they have disclosed to the skilled artisan that different sequences may exist from the same species for an enzyme having the characteristics of Lp-PLA2. Applicants have also described how differences within Lp-PLA2 can be determined within the instant specification. In addition, the skilled artisan should understand that different polymorphisms should exist. Therefore, Applicants enable any person skilled in the art to make the invention commensurate in scope with these claims, as amended.

Applicants respectfully submit that in view of the forgoing remarks and the claims as amended, Applicants have overcome the Examiner's rejection under 35 U.S.C. §112, first paragraph, and the rejection should be withdrawn.

Applicants reserve the right to prosecute, in one or more patent applications, the claims to non-elected inventions, the claims as originally filed, and any other claims supported by the specification. Applicants thank the Examiner for the Office Action and believe this response to be a full and complete response to such Office Action. Accordingly, favorable reconsideration and allowance of the pending claims is earnestly solicited.

If it would expedite the prosecution of this application, the Examiner is invited to confer with Applicants' undersigned attorney.

Respectfully submitted,  
  
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